

**NR 445 Technical Advisory Group Meeting 10**  
**April 18, 2001 Notes**  
**DNR Headquarters**  
**G.E.F II, Room 027, Madison WI**

***TAG Attendance:*** Jim Beasom, Appleton Papers, Inc.; Dan Daggett, WI Bureau of Public Health; Dave Gardner, Briggs & Stratton Corp.; Hank Handzel, WPC & PIW; John Hausbeck, Madison Public Health; Howard Hofmeister, Bemis Company; Brian Mitchell, WI Cast Metals Assoc.; Tom Ravn, Serigraph, Inc.; Annabeth Reitter, StoraEnso (formerly Consolidated Papers, Inc); Rudy Salcedo, City of Milwaukee Health; Jeff Schoepke, WMC; Rob Sherman, Kraft Foods; Ty Stocksedale, SC Johnson; Lloyd Eagan, WDNR; Caroline Garber, WDNR; Dennis Koepke, WDNR; Jeff Myers, WDNR; Andrew Stewart, WDNR  
***Committee Attendance:*** Tina Ball, Xcel Energy; Renee Bashel, Commerce; Marc Bentley, WMCA; Tom Coogan, Commerce; Sarah Decorah, Petroleum Marketers Association; Robert Fassbender, HFO Associates; Roger Fritz, WDNR; Myron Hafele, Kohler Co.; Jennifer Hamill, WDNR; John Heinen, R.C. Foundry; Robert Heitzer; Steve Hirshfeld, WIDOT; Steve Jackson, Alliant Energy; Lynn Knudtson, Future Foam; Kevin McHysk, Murphy Oil; Paul Nelson, Public Service Commission; Jolene Plautz, Kwik Trip; Jerry Rodenberg, WDNR; Thomas Roland, Bemis Co.; Susan Rosenberg, MGE; Eric Roth, WI Petroleum Council; Kathleen Standen, Wisconsin Electric; Jill Stevens, Alliant Energy; Joe Suchecki, Engine Manufacturers Association; Laurel Sukup, WDNR; Lyman Wible, Kestrel Management; Erin White, USEPA Region 5

**I. Welcome/Introductions/Review of Meeting Notes/Agenda Review**

Caroline Garber, Environmental Studies Section Chief

- Welcome - Caroline Garber welcomed TAG and Toxics Committee members.
- **Review of Meeting Notes** – No substantive items were discussed. B. Heitzer pointed out that in a table of NR 438 chemicals, the listing for Carbon Dioxide should have been in Tons/Year instead of Pounds /Year.
- **Review of Meeting Agenda**  
C. Garber reviewed the agenda, added an item on “Search and Inquiry Language” and asked for comments. No one else suggested any additional items for the agenda.

**II. Presentation of Analysis of Diesel Exhaust Exemption and Proposal for a Regulatory Framework for Diesel Exhaust Particulates.**

- Caroline Garber, Andrew Stewart and Dr. Dan Daggett (DHFS) presented information on the staff analysis of diesel exhaust particulate emissions. An overview and history of the issue was presented first (see handouts titled “Evaluation of Diesel Exhaust Emissions”, “Issue Paper – Diesel Exhaust Particulate Emissions and NR 445”) Dr. Daggett presented information on the carcinogenicity of diesel exhaust particulates (see handout titled “Carcinogenicity of Diesel Exhaust Particulates”).
  - *Question* - H. Handzel asked whether the health effects information was based on worker exposure studies and whether the exposure was to mobile or stationary sources.
  - *Answer* - D. Daggett stated that the studies were done on railroad workers.
  - *Comment* – J. Suchecki stated that in spite of numerous agencies’ designation of diesel exhaust particulates as a Suspected Carcinogen, there remains much uncertainty about the risk factors. For example, rat studies may not be predictive of risk to humans because a different biological pathway has been shown to be responsible and it is currently not possible to quantify the risk of diesel exposure using a Unit Risk Factor (which is a measure of potency). In the major studies used to estimate risk, there was no measure of exposure to diesel exhaust. In addition, he stated that EPA’s statement about the range of risks associated with environmental exposures was not the same as a unit risk. He suggested that the DNR go back and review the comments made by CASAC. Furthermore, he said that the California unit risk numbers were “no good” and it was inappropriate to use unit risk numbers to estimate the risk of cancer from modeled exposures.
  - *Response* – D. Daggett stated that laboratory animal experiments use high doses to detect an effect in the shorter life-span of rats and mice and this is standard accepted practice in

toxicology. Epidemiology studies often have as a weakness the lack of precise measures of exposure. He stated that DNR's use of other scientific agencies' determinations on such matters is appropriate, as these agencies are using the best science currently available.. He also noted that NR 445 sets a less stringent standard for suspected (vs. known) carcinogens to account for lack of definitive human exposure data.

- *Comment* – B. Fassbender stated that the exemption of virgin fossil fuels like diesel is what is being changed in the proposal. In his opinion, all the department has shown is that if we use the California risk numbers, there may be a problem. In his opinion, there is very thin evidence to determine if there is sufficient evidence to remove the exemption.
- *Response* – D. Daggett stated that it meets the DNR's definition of a carcinogen and that fact alone would be sufficient to consider the removal of the exemption.
- *Response* – C. Garber stated that as a probable carcinogen, we should do what we can to reduce the potential risk.
- *Comment* – J. Beasom – stated that there is not much of an increase in risk and thought there was a threshold below which there would be a "safe" level of exposure.
- *Response* – D. Daggett replied that there is no suggestion of a threshold.
- *Comment* – H. Handzel commented that before the department makes a decision, which generally states that we rely on NTP and IARC, the department has to make a finding and it is not, by itself sufficient to rely on NTP and IARC only.
- *Response* – A. Stewart asked H. Handzel, to be more specific – "Where does it say that the finding has to be in addition to relying on other agencies?"
- *Response* – H. Handzel said that the Statutes, in 285, describe what is necessary.
- *Response* – A. Stewart replied that no where does it say that these chemical decisions must be made on a chemical by chemical basis.
- *Response* – H. Handzel responded that just because the department has not made this showing for each individual chemical in the past does not mean that it is acceptable to him.
- A. Stewart presented the staff screening level analysis of diesel exhaust particulates and the staff proposal. (See handouts titled "Evaluation of Diesel Exhaust emissions", "Issue Paper – Diesel Exhaust Particulate Emissions and NR 445" and "Appendix 1 & 2").
- *Question* – B. Heitzer asked if the proposal would affect fuel oil combustion because fuel oil and diesel fuel are very similar.
- *Answer* – A. Stewart said that the proposal would cover both.
- *Question* – M. Hafele asked how many permits are for emergency generators (defn. of < 3,000 Kilowatts and < 200 hours of operation)
- *Answer* – C. Garber and A. Stewart stated that permits would not be needed for emergency generators (it is not known how many of these there are), but that the analysis that was done was for generators that needed permits.
- *Question* – B. Fassbender asked about the category of "area source", of which there are 44 sources in the screening analysis. He wanted to know if the department looked at only the "worst" permitted source.
- *Response* – A. Stewart responded, saying that this was a screening level of analysis and its purpose was to look at what had been permitted already, not to look at every permit.
- *Question* – J. Beasom asked "What about the second highest source? Was it a lot lower than the highest?"
- *Response* – A. Stewart stated that this analysis was meant for screening purposes to see if we needed to go further. The area source used in the screening analysis was considered to be 100 meters by 100 meters with the highest concentrations occurring anywhere outside the area. He stated that sources with higher stacks and those that use diesel fuel in external engines were not where most of the questions are.
- *Question* – M. Hafele asked how old the engines were that were in the permits? New engines are much cleaner than older engines.
- *Response* – A. Stewart responded that the analysis was of engines that had been permitted since 1999. The age of the engine was not considered.
- *Comment* – T. Stocksdales suggested that only 5 sources are a problem.
- *Comment* – J. Suchecki stated that new engines reduce particulates by 90% as compared to old engines. He believes the department is misusing the EPA's statements in it's recent health

assessment document by attempting to develop unit risks from the general statements made in the document..

- *Response* – C. Garber stated that we will go back and talk to EPA about this.
- *Comment* – B. Fassbender commented that the department’s analysis used potentials instead of actuals.
- *Response* – C. Garber responded that the analysis looked at levels of emissions that were allowed under the permits. In many cases, the engines are not operated at their allowable levels, but the permits would allow them to do so.
- *Comment* – T. Stocksdale, asked whether portable diesel pumps would be covered in this proposal. When the response was “yes”, they would be covered, he stated that there may be reasons to expand the definition of emergency generator, such as for pumping water in floods, etc.
- *Response* – Staff will look into this.
- *Question* – There was a question about the timing of the proposal with the federal timeframe for low sulfur fuel availability.
- *Response* – This issue of timing will be considered as part of the compliance determination for complying with the diesel particulate requirements.
- *Comment* – T. Stocksdale stated that there may be EPA and New Source Review barriers to changing fuels to meet any proposed diesel rules.
- *Comment* – H. Handzel mentioned that currently, NR 445 requirements are written into construction permits. When those permits are rewritten as operation permits, the NR 445 requirements are written into the permits as well. In such cases, the EPA can enforce a violation of a state requirement and this is a problem for sources.
- *Response* – A. Stewart responded that we will look at the permit interface in this rule revision.
- *Comment* – Regarding emissions testing, if required, for BACT for new sources, how would the CAM (compliance assurance monitoring) rule apply, especially after a control device would be required?
- *Response* – A. Stewart stated that we will investigate what requirements might be.
- *Question* – M. Hafele stated that one might need two performance based standards – one for quarries and another for electrical generators. In addition, one might want to add property lines into the consideration of performance based standards.
- *Question* – T. Stocksdale asked whether NR 445 would apply in emergency situations.
- *Response* – A. Stewart said that NR 445 addresses normal operation only.
- *Comment* – J. Suchecki suggested that the department define emergency better – it should not just be 200 hours of operation.
- *Comment* – J. Hausbeck stated that it is important that the department review the exemption for diesel exhaust particulates and that he believes that it doesn’t make sense to have 100% of diesel engines exempted.
- *Comment* – H. Hofmeister was concerned that removal of the exemption for diesel might bring benzene and other HAPs that are fuel constituents into NR 445 applicability.
- *Comment* – T. Ravn stated that it might not be appropriate to include diesel fueled power generators that are used for fire fighting, emergencies or natural disasters.
- *Comment* – B. Heitzer stated that hospitals and other essential services should not be affected by this rule.
- *Question* – K. Standen asked if sources could “model out” of the rule by showing their risks were very low.
- *Ans.* – Under the proposal, the threshold level would be based on fuel usage and stack height rather than be based on a unit risk factor. Therefore,, “modeling out” will not be an available option
- *Question* – J. Beasom asked whether lower sulfur diesel fuels affect the emissions profile of diesel engines.
- *Ans.* – J. Suchecki, stated that low sulfur fuels and particulate traps are available and both can greatly reduce particulate emissions.
- *Question* – A. Reitter asked what size engines would be affected by this rule?
- *Question* – T. Ravn asked about biodiesel and how the proposal would affect its use.

C. Garber stated that the next step is to develop the fuel usage/stack height threshold matrix and that staff had asked industry for information that would help in this next step. A proposed matrix will be presented for discussion and feedback at the next TAG meeting.

### **III. Progress Report on Business Impact Analysis**

Dennis Koepke, Economist, Ozone Section, gave a report on the status of the business impact analysis. One meeting was held so far and a second was to be held in the afternoon (Wed. April 18, 2001). To date, the workgroup has agreed on a scope of study to find impacted sources for the new NR 445 approx. (164 chemicals) and existing chemicals that have had threshold lowered by a factor of 100 or more (20 chemicals). The workgroup members are trying to find Standard Industrial Classification (SIC) Codes for major industrial uses of each chemical, then identify the major in-state facilities that could be affected by the proposed rules. Once industry groups are identified, the plan is to conduct a survey, focus groups or other investigative approach to assess the regulatory impacts on these sources.

### **IV. Status Report on Accidental Spills Reporting.**

Due to lack of time, C. Garber briefly provided an update on the accidental spill issue. Air management staff are working with the Remediation and Redevelopment staff to include the air spill regulations in NR 706, the spill regulation. Once a staff proposal has been developed, it will be taken to a small ad hoc external stakeholder group, with members from the Spill Focus Group and the NR 445 TAG. The proposal will be brought back to the TAG for review.

### **V. Proposed Revisions to NR 438, Emissions Inventory Reporting Requirements**

- Handouts separating the proposed listing in NR 438 into three categories: 1) New listings not in the current NR 438; 2) Existing listings with changed thresholds; 3) Existing listings that had no changes. This is the same information handed out at a previous TAG meeting, but it is broken out in this format to identify new and changed thresholds.
  - *Question* – L. Bochart asked what the significance was of shading on the handouts.
  - *Ans.* – J. Myers stated that these chemicals were either “TLVs > 99 ppm chemicals” or those that were “Great Lakes Chemicals”.
  - *Comment* – T. Stocksdale suggested that the last column be changed to take out the reference to “using limit of 6,000 lbs/yr” in the heading.

### **VI. Search and Inquiry Language**

- C. Garber and A. Stewart presented language for the stakeholders to examine regarding what might constitute “reasonable search and inquiry” when looking for sources of HAPs. **Note: the version handed out at the meeting was missing the last few lines. See copies that were e-mailed to stakeholders (or on the website) for the correct version.**

### **VII. Next meeting will be on June 19<sup>th</sup> in Milwaukee.**